

ion of honey in one year from the bee moth?

Mr. Holtermann—I have.

Mr. Gemmell—I never did.

Mr. Heise—I have seen it this year with not a particle of honey in the section.

Mr. Armstrong—I have seen this pinkish worm as much as ten years ago.

Mr. Evans—I have the idea that the moth was the one that burrowed in the comb, but that this other was simply a wax worm.

Question: Is the action of the Government in sending out bureau lecturers beneficial or detrimental financially to us?

Mr. McKnight—I don't think it is of any advantage.

Mr. Holtermann—I have been out on farmers' institute work during the past week, and as you know, bee-keepers have had a good deal of difficulty in getting the public to understand that they should not spray during fruit growing. In the evening particularly it is largely customary in the majority of institutes to have the ladies and gentlemen appear and they have a generally good time.

Now, one of the subjects that I, as a rule, take up, is the relation of the bees to plant life; that subject can be brought forward every day we are finding more and more the very important part that the bee is playing in relation to horticulture.

Professor Fowler delivered a very able address in Kingston before the fruit growers' Association upon this subject. Take, for instance, the Northern Spy apple and plant it alone, and you cannot get a single Northern Spy apple. We know for years that the whole construction of flowers was such as to secure cross fertilization, but we did not know until investigations had been conducted, the greater importance of this question that pollen, although mature, from a Northern Spy apple could not fertilize the corresponding part of the flower, and the necessity of having these varieties mixed together. Now, one of the desirable things to advance the cause of the bee-keeping industry, is to bring that before the general public; then, to point out that the fruit grower and the bee-keeper are a class of men who should be united, who have a common interest; and then to point out that the Entomologist, whose duty it is to study the habits of the injurious insects, says you cannot reach these if you spray during the time the trees are in blossom; more than that, parts of the flowers are so delicate that you run the chance of injuring those parts and not alone have you lost your time, and your material but you are actually running the risk of injuring your flowers and you will not get the same amount of fruit.

Mr. McKnight—Do you mean to say that the Northern Spy Apple tree has not the power to fertilize its fruit.

Mr. Holtermann—Most assuredly.

Mr. McKnight—You have no authority to say that.

Mr. McEvoy—In my locality Prof. Shaw set out twelve acres of pure northern spies sixteen years ago, and this year, this great fruit year, there was not an apple on the twelve acres.

Mr. Gemmell—There are any amount of Northern Spy apple trees that do not bear till they are twenty years old.

Mr. Hoshal at this point answered some questions on wintering bees in shallow frames.

Mr. McEvoy—Mr. President, I think it was generally the opinion here last night that the keeping of the brood so close to the super that when the honey season ended there would be nothing in the brood chamber; and what is Mr. Hoshal going to do in the winter? Is he going to have to resort to feeding? On that ground the members here would imagine that would be a poor system to follow, but Mr. Hoshal did not explain how he provides for that.

Mr. Hoshal—There are two ways I provide for that. If you wish to winter upon natural stores, during the summer season we have one of those brood cases filled with honey which is our extracting super; the brood case and extracting super are the same thing; we simply set that aside and when the fall comes and the hive is stripped we put it on top and the bees go into it.

Mr. McEvoy—Do you put a half storey on, or do you winter on these shallow hives? Could you winter on a single Hedden Hive?

Mr. Hoshal—Certainly, we do it winter after winter and have done it since 1887, colonies up to 80, 90 100, right straight along both inside and out, but remember those sections are full of honey, all the honey the combs will carry, there is nothing left in them, what you might call vacant combs for the bees to stick their heads into; it is all filled. They are filled, whether they are full of natural stores or whether the bees are fed with syrup in the fall for them to fill them up.

I have better results where we use two cases or ten Langstroff frames; we have very strong colonies, and when those colonies winter well they certainly beat those that are wintered in single sections, but those colonies that are wintered in two sections vary a great deal. Some of them will be real strong, the same as they went into winter quarters, and some will be reduced until they are very weak